

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Michael Antony Tuke
Serial No. to be assigned
Filed January 23, 2002
For SURGICAL SYSTEM

January 23, 2002

PRELIMINARY AMENDMENT A

TO THE ASSISTANT COMMISSIONER FOR PATENTS,

SIR:

Please enter the following amendments prior to examining the present application:

IN THE SPECIFICATION:

Please replace the Abstract starting on page 24 at line 3 with the following:

- A system for use by a surgeon during a knee replacement operation comprises a navigation computer whose memory holds data relating to size and shape of at least one implant as well as data obtained during pre-operative scanning. The system also registers the three dimensional position and orientation of the patient's tibia and/or femur during the course of the knee replacement operation. The system is capable of applying tension to the ligaments of the patient's knee in flexion or in extension after resection of the patient's tibia. Moreover the computer is programmed to display images of the bones on the computer's screen at different stages of the operation and with potential planes of cut. -

IN THE CLAIMS:

Please amend claim 5 as follows:

5. (Amended) A system according to claim 1, wherein the tensor means comprises an inflatable balloon.

Please amend claim 6 as follows:

6. (Amended) A system according to claim 1, wherein the tensor means is selected from a hydraulic bag, a mechanical device having two parallel motion paddles, a mechanical device having a swivelling motion top paddle, a mechanical device having separate medial and lateral top paddles, a mechanical device having one central arm on to the femur, and a mechanical device having only a medial separation.


REMARKS

Claims 5 and 6 are amended. Claims 1-8 will remain pending upon entry of this amendment. Claims 5 and 6 are amended to eliminate multiple dependencies prior to the calculation of the filing fee.

The Abstract has been amended to reduce the number of words in compliance with the rules.

Applicant respectfully request entry of the foregoing amendments and a speedy examination.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE SPECIFICATION:

The Abstract at page 24, line 3 has been amended as follows:

A system [is disclosed] for use by a surgeon during
[implantation in a patient of a tibial implant and of a femoral
5 implant in the course of] a knee replacement operation [. It]
comprises a navigation computer whose memory [is arranged to]
holds data relating to size and shape of at least one [tibial]
implant [and at least one femoral implant] as well as data
obtained during pre-operative scanning. [of the patient relating
10 to the tibia and femur of the patient and also data relating to
the three dimensional position and orientation of at least one
bone selected from the patient's tibia and the patient's femur
obtained during the course of the knee replacement operation.
It] The system also [includes registration means for
15 registering] registers the three dimensional position and
orientation of the patient's tibia and/or femur during the course
of the knee replacement operation [, as well as detector means
connected to the computer and operatively coupled to the
registration means for detecting the position and orientation of
20 the at least one bone]. The system [further includes tensor
means for] is capable of applying tension to the ligaments of the
patient's knee in flexion or in extension after resection of the
patient's tibia. Moreover the computer is programmed to display
images of the bones on the computer's screen at different stages
25 of the operation and with potential planes of cut. [, inter alia,
one or more images derived from data held in the memory of the
computer and depicting the position and orientation, including
the patient's tibia before or after resection and the patient's
femur with the knee tensed by the tensor means in flexion or in
30 extension, with or without potential planes of cut for resection
of the patient's femur and/or with the tibial component and/or
the femoral component as it will appear after implantation
thereof.]

IN THE CLAIMS:

5. (Amended) A system according to [any one of claims 1 to 4] claim 1, wherein the tensor means comprises an inflatable balloon.

6. (Amended) A system according to [any one of claims 1 to 4] claim 1, wherein the tensor means is selected from a hydraulic bag, a mechanical device having two parallel motion paddles, a mechanical device having a swivelling motion top paddle, a
5 mechanical device having separate medial and lateral top paddles, a mechanical device having one central arm on to the femur, and a mechanical device having only a medial separation.